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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,393	03/09/2004	Hossein Aghamehdi	03-2-309	1893
7590 06/22/2005				
William H. McNeill OSRAM SYLVANIA Inc. 100 Endicott Street Danvers, MA 01923		EXAMINER DOLE, TIMOTHY J		
		ART UNIT 2858 PAPER NUMBER		

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/796,393

Applicant(s)

AGHAMEHDI ET AL.

Examiner

Timothy J. Dole

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to because of the following informalities: “wherein” should be inserted between “Claim 1” and “said housing” in line 1 of claim 3. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Desmier et al. (US 2003/0020494).

Referring to claim 1, Desmier et al. discloses a single cell fuel sensor comprising: a housing (fig. 12 (50)) including a fuel inlet chamber (fig. 12 (156)), a fuel mixing chamber (fig. 12 (150)) and a fuel outlet chamber (fig. 12 (160)); said fuel inlet chamber including an inlet orifice leading into said mixing chamber at a given level (fig. 12); said fuel outlet chamber including an outlet orifice leading out of said mixing chamber at a second level (fig. 12), spaced from said given level (fig. 12); and an electrode (fig. 1 (24)) fitted into said mixing chamber (fig. 12), said electrode being electrically isolated from said housing (paragraphs [0035], [0044] and [0060]).

Referring to claim 4, Desmier et al. discloses the sensor as claimed wherein said electrode is cup-shaped (fig. 8 (24)).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desmier et al. in view of Gilmour (US 6,555,754).

Referring to claim 2, Desmier et al. discloses the sensor as claimed except wherein said electrical isolation is accomplished by a glass seal between said housing and said electrode.

Gilmour discloses a fuel sensor wherein said electrical isolation is accomplished by a glass seal (fig. 3 (52)) between said housing (fig. 3 (44)) and said electrode (fig. 3 (54)).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the glass seal of Gilmour into the sensor of Desmier et al. for the purpose of providing a hermetic seal that can withstand temperature variations without a loss of integrity (column 1, lines 33-41).

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6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desmier et al. in view of McKenzie et al. (US 6,842,017).

Referring to claim 3, Desmier et al. discloses the sensor as claimed except wherein said housing is provided with extending ears provided with mounting apertures.

McKenzie et al discloses a fuel sensor wherein said housing (fig. 2 (50)) is provided with extending ears provided with mounting apertures (fig. 2 (52)).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the mounting apertures of McKenzie et al. into the sensor of Desmier et al. for the purpose of securing the sensor in place (column 3, lines 25-28).

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desmier et al. in view of Kopera (US 5,550,478).

Referring to claim 5, Desmier et al. discloses the sensor as claimed except wherein said inlet and said outlet orifices are provided with rounded corners.

Kopera discloses a fuel sensor wherein said inlet and said outlet orifices are provided with rounded corners (fig. 4, see the dashed-rounded inner portion of inlet/outlet 230)).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the rounded corners of Kopera into the sensor of Desmier et al. for the purpose of providing smooth fuel flow from one section of the sensor to the next.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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The following patent is cited to show the state of the art with respect to fuel sensors.

USPN 5,182,523 to Ertel et al.: This patent shows a fuel sensor with an inlet, outlet and electrode that is isolated from the housing by a glass seal.

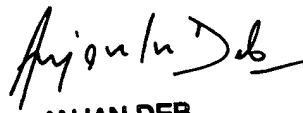
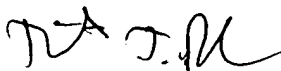
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Dole whose telephone number is (571) 272-2229. The examiner can normally be reached on Mon. thru Fri. from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJD



ANJAN DEB
PRIMARY EXAMINER